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LISTS OF SPECIES

# Amphibians and Reptiles, Romblon Island Group, central Philippines: Comprehensive herpetofaunal inventory

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**ABSTRACT:** We present results from several recent herpetological surveys in the Romblon Island Group (RIG), Romblon Province, central Philippines. Together with a summary of historical museum records, our data document the occurrence of 55 species of amphibians and reptiles in this small island group. Until the present effort, and despite past studies, herpetological diversity of the RIG and their biogeographical affinities has remained poorly understood. We report on observations of evolutionarily distinct amphibian species, including conspicuous, previously known, endemics like the forest frogs *Platymantis lawtoni* and *P. levigatus* and two additional suspected undescribed species of *Platymantis*. Moderate levels of reptile endemism prevail on these islands, including taxa like the karst forest gecko species *Gekko romblon* and the newly discovered species *G. coi*. Although relatively small and less diverse than the surrounding landmasses, the islands of Romblon Province contain remarkable levels of endemism when considered as percentage of the total fauna or per unit landmass area.

## INTRODUCTION

The Romblon Island Group (RIG) is a small assemblage of islands located in the central Philippines between three major faunal regions (Luzon, Mindoro, and Visayan Pleistocene Aggregate Island Complexes (PAICs; Brown and Diesmos 2002; 2009; Figure 1). The largest landmasses in this group are the islands of Romblon, Tablas, and Sibuyan (Figure 1). Geologically, these islands, along with the Buruanga Peninsula of northwest Panay Island and the southwestern portion of Mindoro Island, were part of the North Palawan Terrain, itself a part of the Palawan microcontinental block that migrated across what is now the South China Sea following its separation from Asia (Zamoras and Matsuoka 2004; Zamoras *et al.* 2008). The complex, mobile geological history of these central Philippine landmasses has been discussed in the context of the impact that crustal movements, spreading rift zones, and subduction patterns (Yumul *et al*. 2003; 2009) may have had on the distribution of life in today's central Philippines (Brown and Guttman 2002; Brown *et al*. 2009a; Blackburn *et al*. 2010; Esselstyn *et al*. 2010; Siler *et al*. 2012). Additionally, more recent (Pleistocene) sea level oscillations may have impacted the distribution of some of the island group's species. For example, it is known that Romblon and Tablas were conjoined to the exclusion of Sibuyan at multiple points during the last 500,000 years (Voris 2000).

Owing to its central position in the Philippine archipelago, the fauna of the RIG is of particular interest to biogeographers (Goodman *et al.* 1995). Having not been connected to the larger, surrounding landmasses, these islands must have experienced faunal development as a result of cross-water dispersal from Luzon, Mindoro, and the islands of the western Visayas (in particular northern Panay). The birds and mammals of the region (Goodman and Ingle 1993; Goodman *et al.* 1995; Ingle 1993; Rickart *et al.* 2005; Allen 2006; Esselstyn and Goodman 2010) are known to include moderate levels of endemism, and a few endemic species of frogs and lizards have been described (Brown and Alcala 1974; 1978; Brown *et al.* 2011). However, as of yet, no attempt has been made to comprehensively elucidate the systematic affinities of the amphibian and reptiles of the RIG.

In this paper, we provide the first comprehensive report on the amphibian and reptile records for Romblon Province and we discuss the biogeographical affinities of the taxa from the surrounding regions of the archipelago.

## MATERIALS AND METHODS

We summarize the observations of a series of recent surveys, as well as all known museum collections from historical surveys of islands within the RIG. In total, 27 unique sites have now been surveyed in Romblon Province, Philippines (Table 1; Figures 2–4). Catalog numbers correspond to voucher specimens deposited at the University of Kansas Natural History Museum and Biodiversity Institute (KU), the U.S. National Museum of Natural History (USNM), Harvard University's Museum of Comparative Zooology (MCZ), the National Museum of the Philippines (PNM), the Field Museum of Natural History (FMNH), and the California Academy of Sciences (CAS) are included below. Field survey protocols followed guidelines outlined in an existing Memorandum of Agreement (MOA) between the University of Kansas and the Philippine Protected Areas and Wildlife Bureau (PAWB), and those outlined in an active Gratuitous Permit to Collect (GP), also provided by PAWB.

We examined similarities in terrestrial herpetofaunal assemblages among the major islands in the RIG, as well as with those of their nearest potential sources of colonists,

islands of the three major, recognized faunal regions surrounding the province: the Luzon Pleistocene Aggregate Island Complex (PAIC; Brown and Diesmos 2002; 2009), the Mindoro PAIC, and the Visayan PAIC. We computed Simpson similarity indices (S) using the formula S = C/N, where C is the number of species common to both islands in the RIG, or the island in the RIG and the respective PAIC, and N is the number of species on the island of interest (Cheatham and Lazell 1969). Species lists were based on Brown (2007), Siler (2011), Frost (2011) and Siler, Brown, Diesmos, and Oliveros (unpublished data) for the Luzon, Mindoro and Negros-Panay PAICs.

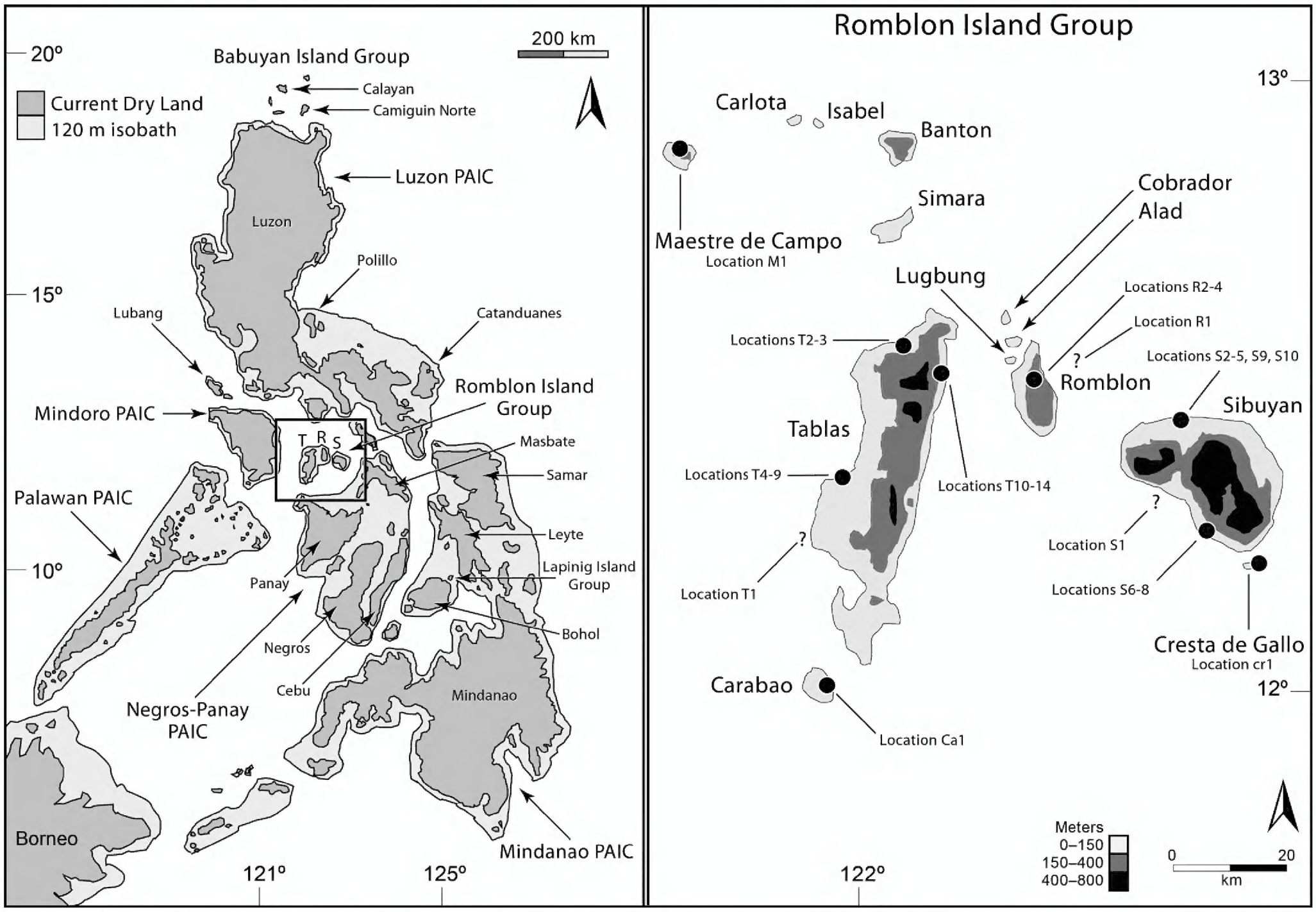



**FIGURE 1.** (Left) Map of the Philippines showing the five recognized major Pleistocene Aggregate Island Complexes (PAICs) and additional deep-water islands. Current islands in the Philippines are shown in medium grey; light gray areas enclosed in black 120 m bathymetric contours indicate the hypothesized maximum extent of land during the mid- to late Pleistocene. The location of Romblon Province in the central Philippines is outlined by a box. (B) Islands of the Romblon Province, showing the localities referenced in the study (Table 1). Elevation contours are indicated with incremental shading, and sampling localities are indicated by black circles. Question marks denote historical island records referenced but with unknown locality information.

**TABLE 1.** Localities visited in Romblon Province, Philippines listed by site number.

| SITE | LOCALITY | COORDINATES |
|---|---|---|
| Ca1 | Carabao Island, Municipality of San Jose | 12°3’34.8” N, 121°54’86.4” E |
| Cr1 | Cresta de Gallo Island | 12°11’21.4” N, 122°41’76” E |
| M1 | Maestre de Campo Island, Municipality of Concepcion, Barangay San Vicente | 12°54’93.6” N, 122°43’49.4” E |
| R1 | Romblon Island (specific locality unrecorded) | Unknown |
| R2 | Romblon Island, Municipality of Romblon, Barangay Cajimos | 12°35’67.6” N, 122°16’51.8” E |
| R3 | Romblon Island, Municipality of Romblon, Barangay Li-o | 12°34’44.6” N, 122°17’64” E |
| R4 | Romblon Island, Municipality of Romblon, Barangay Lunas | 12°30’94.8” N, 122°16’96.8” E |
| S1 | Sibuyan Island (specific locality unrecorded) | Unknown |
| S2 | Sibuyan Island, Municipality of Magdiwang, Barangay Poblacion | 12°28’96.2” N, 122°30’96.6” E |
| S3 | Sibuyan Island, Municipality of Magdiwang, Barangay Silum | 12°29’50.2” N, 122°35’45.4” E |
| S4 | Sibuyan Island, Municipality of Magdiwang, Barangay Talaba, Mount Guiting-Guiting Natural Park | 12°27’67.2” N, 122°39’86.4” E |
| S5 | Sibuyan Island, Municipality of Magdiwang, Barangay Tampayan | 12°29’16” N, 122°30’96” E |
| S6 | Sibuyan Island, Municipality of San Fernando | 12°18’86.4” N, 122°33’86.4” E |
| S7 | Sibuyan Island, Municipality of San Fernando, Barangay Espana | 12°22’2” N, 122°32’25” E |
| S8 | Sibuyan Island, Municipality of San Fernando, Barangay Taclobo | 12°20’11.8” N, 122°33’58.2” E |
| S9 | Sibuyan Island, Lambingan Falls | 12°29’ N, 122°35’ E |
| S10 | Sibuyan Island, NW slope of Mount Guiting-Guiting | 12°27’ N, 122°33’ E |

**Table 1.** *Continued.*

| SITE | LOCALITY | COORDINATES |
|---|---|---|
| T1 | Tablas Island (specific locality unrecorded) | Unknown |
| T2 | Tablas Island, Municipality of Calatrava, Barangay Balogo | 12°36'31.2" N, 122°2'73.6" E |
| T3 | Tablas Island, Municipality of Calatrava, Barangay San Roque | 12°37'74" N, 122°3'70.2" E |
| T4 | Tablas Island, Municipality of Odiongan, Barangay Anahaw | 12°23'39.4" N, 122°59'89.8" E |
| T5 | Tablas Island, Municipality of Odiongan, Barangay Hinagoman | 12°21'81" N, 122°1'36.8" E |
| T6 | Tablas Island, Municipality of Odiongan, Barangay Liwanag | 12°24'12.6" N, 121°59'55.6" E |
| T7 | Tablas Island, Municipality of Odiongan, Barangay Mayha | 12°24'96.6" N, 122°59'73.6" E |
| T8 | Tablas Island, Municipality of Odiongan, Barangay Tuguis | 12°22'27.2" N, 122°58'55.4" E |
| T9 | Tablas Island, Municipality of Odiongan | Unknown |
| T10 | Tablas Island, Municipality of San Agustin, Barangay Cabolutan | 12°34'99.8" N, 122°6' E |
| T11 | Tablas Island, Municipality of San Agustin, Barangay Dubduban | 12°34'50.6" N, 122°6'79.8" E |
| T12 | Tablas Island, Municipality of San Agustin, Barangay Guintiguindian | 12°34'22.4" N, 122°6'69" E |
| T13 | Tablas Island, Municipality of San Agustin, Barangay Poblacion | 12°34'20" N, 122°8'46" E |
| T14 | Tablas Island, Municipality of San Agustin, Mt. Progresso | 12°34'86.6" N, 122°5'32.2" E |

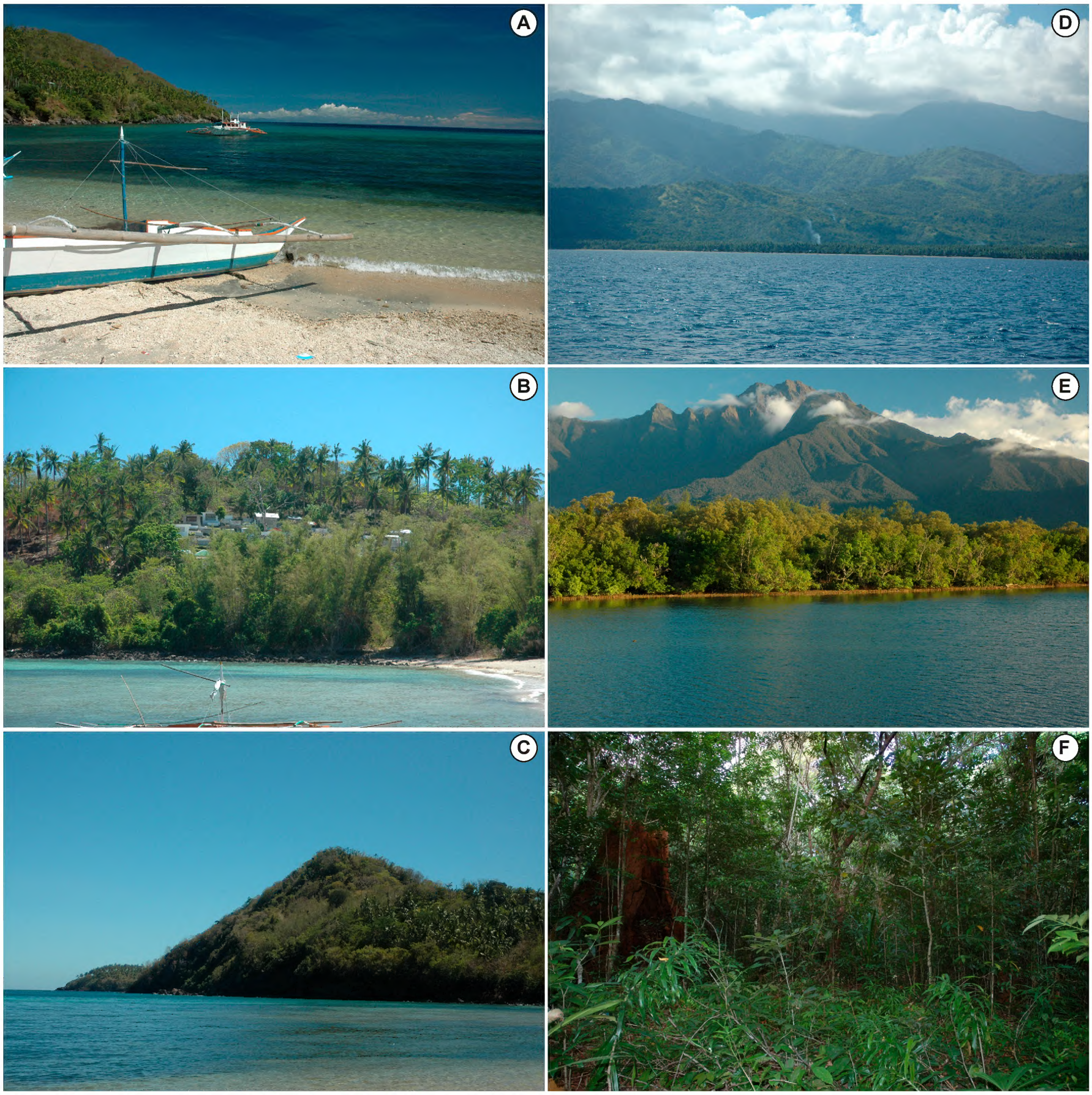



**Figure 2.** A) View of shallow marine habitat off coast of Location M1; B) Coastal habitat at Location M1; C) Coastal habitat at Location M1; D) Coastal habitat at Location S4; E) View of Mt. Guiting-Guiting (Location S4); F) Forest habitat at Location S4. Photos by CDS and RMB.

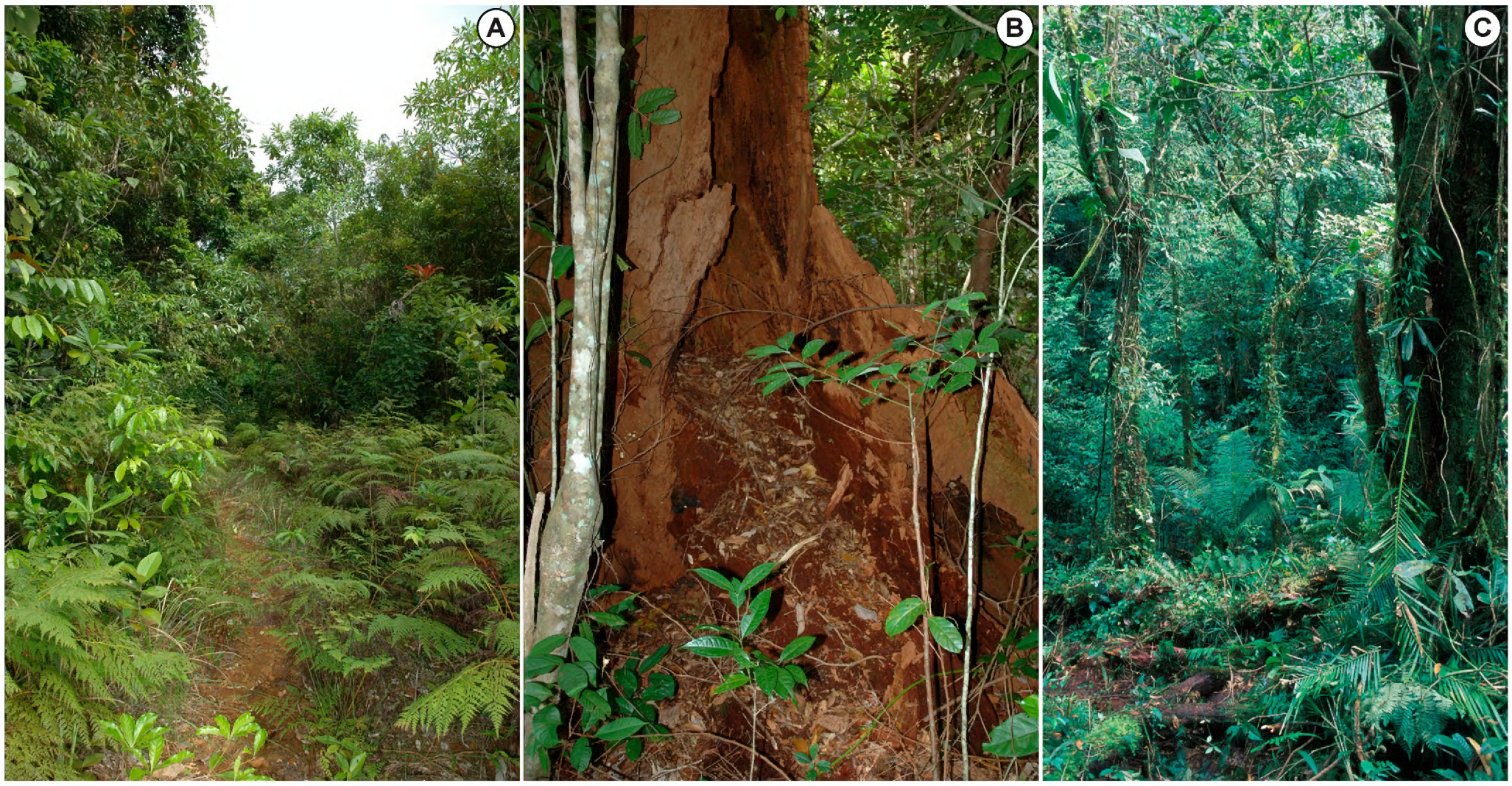



**FIGURE 3.** A) Forest habitat at Location S4; B) Rotting tree microhabitat at Location S4; C) Forest habitat at Location S4. Photos by CDS and RMB.




**FIGURE 4.** A) Mid-elevation view of Mt. Guiting-Guiting (Location S4); B) Mangrove swamp near location S4. Photos by RMB.

## Results and Discussion

*Species Accounts*

### Amphibia

#### Bufonidae

*Rhinella marina* (Linnaeus, 1758)

We collected individuals of this introduced and invasive species at two localities on Tablas Island and observed specimens in agricultural areas near the Mt. Guiting-Guiting National Park headquarters on Sibuyan (specimens not collected). This introduced (Diesmos *et al.* 2006) species is common in highly disturbed habitats and can often be heard breeding in loud choruses in flooded agricultural fields. Location T6: KU 301835; Location T3: KU 301818.

#### Ceratobatrachidae

*Platymantis* cf. *dorsalis* (Duméril, 1853)

This species appears to be common throughout the RIG, and has been observed on Tablas, Romblon, and Sibuyan, at seven distinct localities. Individuals were observed often in the leaf litter of the forest but were also found in residential areas. Our specimens from Romblon represent new island records. Figure 5. Location R4: KU 304305–304308, 304480; Location S2: KU 304386–304388; Location S4: KU 304309–304321, 304481–304482; Location S8: CAS 137095–137099, 139184–139185; Location T1: MCZ 14329, 14381–14385; Location T2: KU 315309–315328; Location T3: KU 304379–304385, 304478–304479; Location T4: KU 315306–315308; Location T11: CAS 137209–137246, 139192–139207, 145932, KU 304235, 304322–304333, 304336–304338, 304347, 304349–304350, 304358–304368, 304370, 304375–304378, 304389, 304391–304393, 304395–304400, 304402, 304407–304409, 304411, 304439–304443, 304446–304454, 304463–304471, 304476–304477; Location T14: CAS 137293–137294.




**Figure 5.** A) *Platymantis* cf. *dorsalis* in life (KU 304387; Location S2); B) *Platymantis* cf. *dorsalis* (RMB 2928, deposited in PNM; Location S5); C) *Platymantis* cf. *dorsalis* (KU 304519; Location T10). Photos by CDS and RMB.

*Platymantis* cf. *pygmaeus* Alcala, Brown, and Diesmos, 1998

Individuals of this diminutive species of frog were observed calling from leaf litter around the park headquarters for Mt. Guiting-Guiting Natural Park on Sibuyan Island. Our specimens from Tablas and Sibuyan are new records for these islands. Figure 6. Location S4: KU 300431–300434, 309117; Location S10: FMNH 236141; Location T2: KU 315300–315305.

*Platymantis lawtoni* Brown and Alcala, 1974

This arboreal species of the *P. hazelae* group of shrub frogs (Brown *et al.* 1997) is known only from Tablas Island, and has been observed at three localities. Individuals were often collected among the branches of ferns in secondary and primary forest. On recent surveys of Tablas Island, we observed *P. lawtoni* in second growth forest at roughly 300 m elevation, where individuals were seen on saplings and on trees (on leaves or branches) from 1–6 m above the ground. Males of this species have a moderately loud call, and we observed individuals calling from 1–20 m apart. The call is made up of two continuous notes that sound like striking a metal object against an empty glass bottle, with the second note of higher frequency than the first. The "clinking" sound is repeated in a series roughly 3–12 times, with each note separated by intervals of 2–3 seconds. No individuals were observed calling from the ground. All observations were made far from streams. Figure 7. Location S10: FMNH 236092, 236096, 236142, 236146, 249701; Location T2: KU 315280–315286; Location T11: CAS 135732; Location T14: CAS 135733.

*Platymantis levigatus* Brown and Alcala, 1974

This species is a unique member of the Philippine radiation of frogs of the genus *Platymantis* in having a microhabitat preference for banks of fast-flowing streams. Individuals were observed on rocks mid-stream and along the banks of rivers and streams. Unlike any other described species of Philippine *Platymantis,* when disturbed, individuals of *P. levigatus* jump into flowing water. This

species has been observed on Tablas and Sibuyan, and is presumed to also occur on Romblon Island. *Platymantis levigatus* is the only described Philippine member of the genus with a strictly riparian microhabitat preference and a tendency to jump in water when disturbed (RMB, ACD and CDS, *pers. obs.*). Figure 8. Location S4: KU 300416–300430, 304522–304527, 304529–304531, 304533–304534, 304539–304542, 304544–304548, 304943–304970; Location S10: FMNH 249700; Location T2: KU 315287–315299; Location T3: KU 304506–304515, 304519–304520, 304543; Location T11: KU 304516–304518, CAS 136097–136098, 137258–137264, 139208; Location T14: CAS 137295.




**Figure 6.** A) *Platymantis* cf. *pygmaeus* (KU 300433; Location S4); B) *Platymantis* cf. *pygmaeus* (RMB 2940, deposited in PNM; Location S5). Photos by CDS and RMB.



**Figure 7.** *Platymantis lawtoni* in life (KU 315280; Location T2). Photo by CHO.

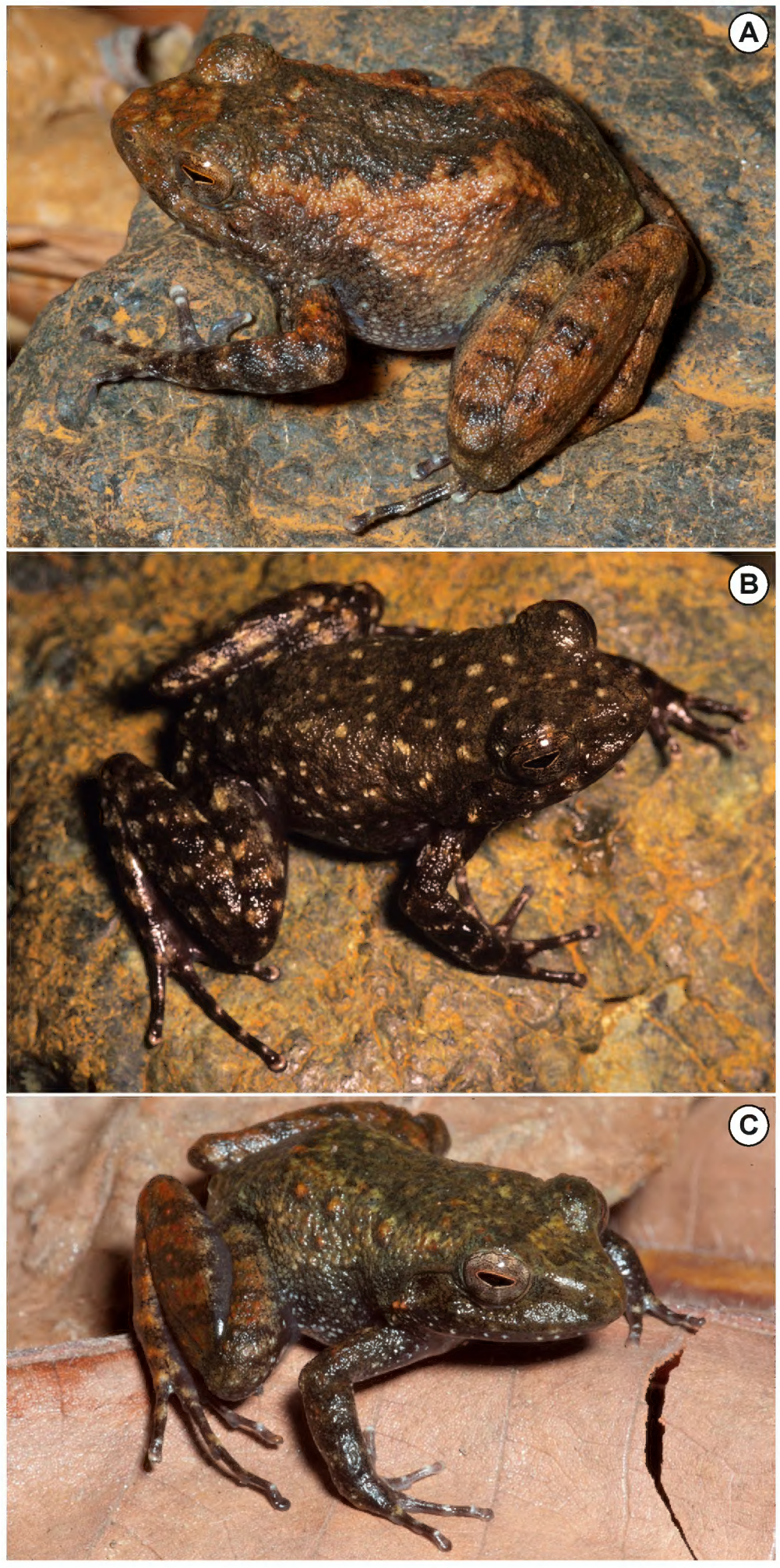



**Figure 8.** A) *Platymantis levigatus* in life (KU 300424; Location S4); B) *Platymantis levigatus* (KU 303849; Location T11); C) *Platymantis levigatus* in life (KU 304479; Location S5). Photos by CDS and RMB

## Dicroglossidae

*Fejervarya moodei* (Taylor 1920)

This widespread endemic Philippine species is common in disturbed habitats in coastal areas. We observed *F. moodei* on Tablas, Sibuyan, and Romblon. Additionally, this species has been reported from Carabao Island. Our specimens from Romblon are new records for this island. Location Ca1: CAS 128097–128107, 128196–128197; Location R3: KU 301976–301977; Location S1: CAS 73862, 73888–73895; Location S2: KU 30946–301949; Location S4: KU 303292; Location S5: KU 326233–326237; Location S8: CAS 137101–137105; Location T1: MCZ 14190–14195; Location T6: KU 301959–301960; Location T9: MCZ 14196–14200; Location T10: CAS 137265–137266, 139210, USNM 305716–305719; Location T13: KU 303295–303296.

*Fejervarya vittigera* (Wiegmann, 1834)

*Fejervarya vittigera* is a widespread endemic species common in disturbed habitat. We collected individuals of this species on Tablas, Sibuyan, and Romblon islands, all representing new records for these islands. Location R3: KU 302067; Location T3: KU 302026–302027; Location T4: KU 315245–315250; Location T7: KU 315234–315244.

*Limnonectes* cf. *leytensis* (Boettger, 1893)

*Limnonectes* cf. *leytensis* has been recorded on the islands of Tablas, Sibuyan, and Carabao. Individuals were found near water sources ranging from small temporary pools, to the banks of streams to marshes and flooded areas. On the Visayan islands of Negros and Panay, *Limmonectes* cf. *leytensis* demonstrates a microhabitat preference for swamps (Alcala and Brown 1998), but on Sibuyan Island it has been observed exclusively in riparian, streamside habitats (RMB, ACD and CDS, *pers. obs.*). Our specimens from Tablas are new records for this island. Figure 9. Location Ca1: CAS 128136–128143, 134221–134222, 145934–145937; Location S2: KU 302120–302128, 302133; Location S4: KU 302129–302132, 303267, 303479; Location S5: KU 326349–326352, 327508; Location S8: CAS 137108–137127; Location T2: KU 315251–315269; Location T3: KU 302119.



**Figure 9.** *Limnonectes* cf. *leytensis* in life (KU 302129; Location S5). Photo by CDS.

*Occidozyga laevis* (Günther, 1858)

A common puddle frog, this species is found throughout the Philippines in shallow, slow-moving streams, small pools of water in disturbed habitat, and in small stagnant pools (*i.e.* puddles in forests to water buffalo wallows in agricultural areas). We collected this species in shallow pools of water in agricultural and residential areas on Tablas, Romblon, and Sibuyan. Our specimens from Romblon are new records for this island. Location R4: KU 303519–303522; Location S1: FMNH 236127; Location S2: KU 302275–302276; Location S4: KU 302277–302287, 303510–303518; Location S5: FMNH 236100, 236110, 236123, KU 326480–326481; Location S8: CAS 137089–137094; Location S10: FMNH 236128; Location T2: KU 315275–315279; Location T3: KU 302239–302243, 303488; Location T5: KU 315270–315274; Location T11: CAS 137305–137317, KU 302314, 303523–303537; Location T12: KU 302315–302318.

## Microhylidae

*Kaloula* cf. *conjuncta negrosensis* (Peters, 1863)

*Kaloula* cf. *conjuncta negrosensis* can be found in temporary pools, puddles, and ponds, following heavy rains. These scansorial frogs have large, expanded toe pads, and we observed individuals in second growth forests on the islands of Tablas, Sibuyan, and Carabao, and on grassy banks of ponds in agricultural areas on Sibuyan. The results of a recent phylogenetic study on Philippine microhylids in the genus *Kaloula* provide preliminary evidence of possible mitochondrial introgression with true *K. c. negrosensis* from Panay Island in the Negros-Panay PAIC (Blackburn *et al.* unpublished data). Figure 10. Location Ca1: CAS 128144, 128187; Location S8: CAS 137085–138086; Location S10: FMNH 236126; Location T2: KU 315233; Location T11: CAS 137207–137208, 139191, 185737.



**Figure 10.** *Kaloula* cf. *conjuncta negrosensis* in life (RMB 2935, deposited in PNM; Location S5). Photo by RMB.

## Ranidae

*Hylarana erythraea* (Schlegel, 1837)

This wide ranging, non-native Philippine species (Diesmos *et al.* 2006) was found on the islands of Tablas, Sibuyan and Romblon around temporary or stagnant water sources. Specimens were observed in heavily disturbed habitat and residential areas as well as near the edges of second growth forest. Our specimens from Romblon are new records for this island. Location R3: KU 302372–302373; Location S1: CAS 62456–62459, 73883–73887; Location S2: KU 302351–302353; Location S4: KU 302354–302360, 304143; Location S5: KU 326196–326197; Location S8: CAS 137106–137107, 139186; Location T1: MCZ 14076–14082; Location T7: KU 315329–315332; Location T9: MCZ 14073–14075; Location T11: CAS 137267–137273, 145933.

## Rhacophoridae

*Polypedates* cf. *leucomystax* (Gravenhorst, 1829)

Locally referred to as the Palakang Saging (or Banana Frog), *Polypedates* cf. *leucomystax* is an arboreal species found usually in disturbed habitat and residential areas around temporary pools of water. The species has been recorded on Tablas, Romblon, Sibuyan, and Carabao. A recent phylogenetic study of the species revealed nearly all populations in the Philippines to be genetically identical to one another, an indication that the species may have

recently invaded the Philippines, possibly due to human-mediated dispersal (Brown *et al.* 2010). Our specimens from Romblon are new records for this island. Figure 11. Location Ca1: CAS 128114; Location R3: KU 302472–302474; Location R4: KU 302475–302485, 303729–303735; Location T2: KU 315335; Location T3: KU 302423; Location T4: KU 315333–315334; Location T9: MCZ 14408–14416; Location T11: CAS 137274–137280, 139209; Location T14: CAS 137297.

*Rhacophorus pardalis* Günther, 1858

This species of arboreal gliding frog was observed in disturbed to second growth forest habitat on the island of Tablas. In other parts of its range, this species can be observed in large aggregations on shrubs, trees, and saplings around temporary pools of water after heavy rains (CDS and RMB, *pers. obs.*). The single specimen collected represents a new island record for Tablas, as well as the first observation of *Rhacophorus pardalis* in Romblon Province. Location T2: KU 315336.



**Figure 11.** *Polypedates leucomystax* in life (KU 302474; Location S4). Photo by CDS.

## Reptilia (Lizards)

### Agamidae

*Bronchocela marmorata* (Kuhl, 1820)

We found this species asleep at night on branches of trees and shrubs in disturbed forest and bushes surrounding agricultural areas 2–4 m above the ground. This species is widely distributed in the Philippines. Location Ca1: CAS 128152–53, 128170, 128188; Location S1: USNM 36167; Location S5: FMNH 236055–59, 236113, KU 326251; Location S8: CAS 139213; Location T5: KU 315337; Location T11: CAS 139215–17.

*Draco quadrasi* Boettger, 1893

This species has been collected on the islands of Romblon and Sibuyan, and is quite common on the trunks and canopies of coconut trees. *Draco quadrasi* possesses a disjunct distribution in the Philippines, occurring in the Mindoro faunal region (Mindoro and Semirara islands) and on Romblon and Sibuyan in the RIG (but not Tablas, where it is replaced by *D. spilopterus*). Figures 12, 13. Location R1: USNM 38638; Location R2: KU 305094–305104; Location S1: CAS 62480–62483, 73853–73861, CAS-SUR 6261, CM 2238–50, USNM 36171–36173; Location S2: KU 305064–305065; Location S3: KU 305078–305084; Location S4: KU 305068–305077, 305085, 305087–305093; Location S5: FMNH 236060–70; Location S8: CAS 137059–137060, 139176–139179, 185498, USNM 496847–496848; Location S9: FMNH 251105; Location S10: FMNH 251106–08, 251124–25.

*Draco spilopterus* (Wiegmann, 1834)

This species is widespread throughout much of the central and northern Philippine islands. It has been commonly observed in the island of Tablas and Carabao in Romblon Province, on the trunks and canopies of coconut trees. Figures 14, 15. Location Ca1: CAS 128151, 128162, 128168–128169; Location T1: MCZ 20095–20097; Location T3: KU 305113–305124, 305130; Location T5: KU 315339; Location T8: KU 315338; Location T10: KU 305126–305129, USNM 496889–496890; Location T11: CAS 139188, 185499; Location T12; KU 305066–305067, 305125, 305131–305133.

*Gonocephalus* cf. *sophiae*

A single individual referred to the genus *Gonocephalus* has previously been collected from Sibuyan, representing the first record for the province. Currently, all populations from the Luzon, Mindoro and Visayan PAICs are recognized as *G. sophiae*. Location: S10: FMNH 251110.

*Hydrosaurus pustulatus* (Eschscholtz, 1829)

We collected individuals of this species at night on branches over streams. This species of sailfin lizard is known to occur on all major, and many small and isolated,



**Figure 12.** *Draco quadrasi* female in life (KU 305065; Location S2). Photo by CDS.




**Figure 13.** A) *Draco quadrasi* in life (KU 305096; Location R2); B) *Draco quadrasi* female (KU 305098; Location R2); C) *Draco quadrasi* female patagia in ventral view (KU 305065; Location S2); D) *Draco quadrasi* female patagia in dorsal view (KU 305065; Location S2). Photos by CDS and RMB.

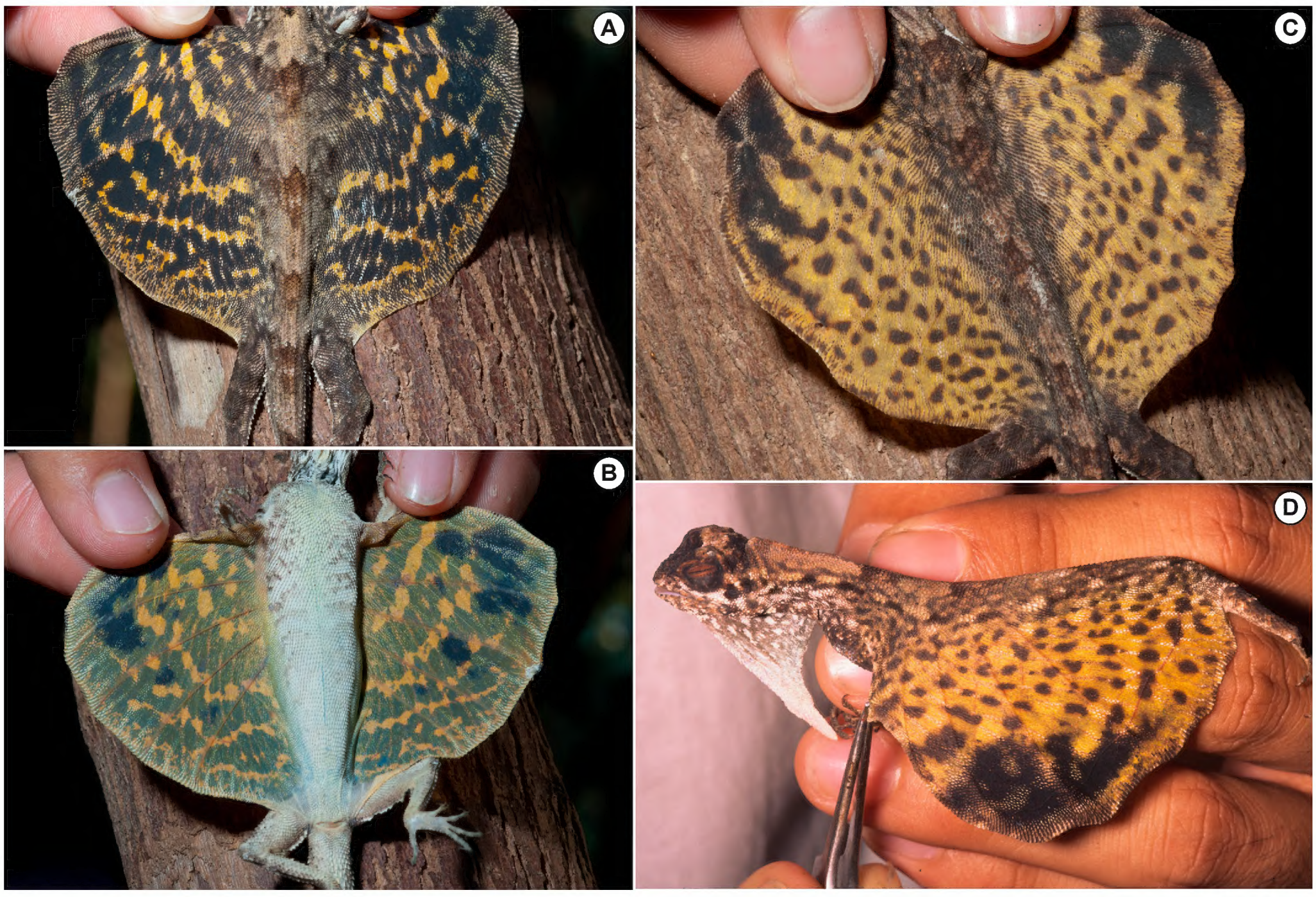



**Figure 14.** A) *Draco spilopterus* in life (KU 305114; Location T3); B) *Draco spilopterus* (KU 305114; Location T3); C) *Draco spilopterus* (KU 305115; Location T3); D) *Draco spilopterus* (KU 305131; Location S2). Photos by CDS and RMB.



**Figure 15.** *Draco spilopterus* in life (KU 305115; Location T3). Photo by CDS.

Philippine islands except Palawan. Our specimens from Romblon and Tablas are new records for these islands. Figure 16. Location R4: KU 302543–302544, 303823–303824, 305150; Location S5: FMNH 236047–50, 236131; Location S8: CAS 139214; Location T3: KU 302537–302538.

## Gekkonidae

*Cyrtodactylus philippinicus* (Steindachner, 1867)

This species is endemic to the northern and west-central islands of the Philippines. We encountered these lizards on Tablas, Romblon and Sibuyan islands. Our specimen from Romblon is a new record for the island. A comprehensive phylogenetic study of Philippine *Cyrtodactylus* species based on DNA sequence data demonstrated that samples from the RIG form a clade (Siler *et al.* 2010a). However, it was unclear from this work whether lizards from the island group were more closely related to populations from Mindoro or from Negros and Panay. Figure 17. Location R4: KU 303852; Location S4: KU 302635, 303848–303849; Location S7: CAS 185501; Location S8: CAS 137058, 185500; Location S10: FMNH 236073, 251116; Location T1: MCZ 44125–44127; Location T2: KU 315340–315345; Location T10: USNM 204792, 496891; Location T11: CAS 137185–137186; Location T14: CAS 185502.

*Gehyra mutilata* Wiegmann, 1834

This species, together with *Hemidactylus frenatus* and *H. platyurus*, makes up the group of three common, widespread species of house geckos in the Philippines. We collected individuals of this species on Tablas and Sibuyan island, and it has also been reported from Carabao Island. Location Ca1: CAS 128074–128083, 128120, 128123–128128, 128176; Location S5: KU 326536–326537; Location S8: CAS 137061–137063, USNM 496849; Location T1: MCZ 26075; Location T6: KU 302662; Location T11: CAS 137192–137193.




**Figure 16.** A) *Hydrosaurus pustulatus* in life (KU 302537; Location R3); B) *Hydrosaurus pustulatus* (ACD 1531, deposited in PNM; Location S5). Photos by CDS and RMB.



**Figure 17.** *Cyrtodactylus philippinicus* in life (KU 303849; Location S4). Photo by RMB.

*Gekko coi* Brown, Siler, Oliveros, Diesmos and Alcala, 2011

This newly described species from Sibuyan was collected on tree trunks among the limestone outcrops in secondary to primary growth forest (Brown *et al.* 2011). Individuals were also observed in and around cave systems. Similar to *G. romblon*, the conservation status of this single island endemic species should be evaluated.

We suspect that it is not threatened because most of its range occurs within a protected area (Mt. Guiting-Guiting Natural Park). Figure 18. Location S5: KU 326208, FMNH 251114, 251115; Location S8: CAS 139180–139182, 155896, 185496, USNM 496850, 496851.

*Gekko gecko* (Linnaeus, 1758)

This taxon is known to occur throughout the Philippines with the exception of the Batanes and Babuyan Island groups (CHO, *pers. obs.*). Specimens have been collected on Tablas, Sibuyan, Maestro de Campo, and Carabao. Specimens from Sibuyan and Maestre de Campo represent new island distribution records. Figure 19. Location Ca1: CAS 128113, 128179; Location M1: KU 302696, 304164; Location S4: KU 302700–302703, 304163; Location S5: FMNH 236071, 236072; Location T5: KU 315349; Location T11: KU 303974–304976.

*Gekko mindorensis* Taylor, 1919

This species has a wide distribution throughout the Philippine islands. The diversity within Philippine species in the genus *Gekko* has steadily increased over the years (Rösler *et al.* 2006; Brown *et al.* 2008; 2009b; 2011; Siler *et al.* in press), and *G. mindorensis* may eventually prove to be a complex of cryptic species. We collected individuals of this species on Maestre de Campo, and a specimen has previously been collected on Sibuyan. Location M1: KU 302733–302735, 305137; Location S9: FMNH 251109.



**Figure 18.** The holotype of *Gekko coi* in life (PNM 9765 (Field no. RMB 2961; formerly KU 326208; Location S5). Photo by RMB.

*Gekko romblon* Brown and Alcala, 1978

This species has been historically recognized to occur on the islands of Romblon, Tablas, and Sibuyan in the RIG. The description of this Philippine endemic was based on specimens from Tablas (type locality: holotype CAS 139190) and Sibuyan islands. Recently, additional material from Romblon and further examination of specimens and genetic data revealed that individuals from Sibuyan represented a new species, distinct from the geckos of Tablas and Romblon (Brown *et al*. 2011; see *Gekko coi* above). The conservation status of this highly restricted-range species needs urgent evaluation. Although two specimens from Carabao Island are listed as *G. romblon* (CAS 128163 and 128175), we are hesitant to recognize this population as true *G. romblon*, and close inspection of these individuals is needed for proper identification. Given that the Maestre de Campo Island population of *Gekko* have been identified as part of the *G. mindorensis* complex (Siler *et al.* in press), we suspect the population on the small island of Carabao is conspecific with *G. mindorensis*. Figure 20. Location R3: KU 302736–302742; Location R4: KU 303977–303978; Location T2: KU 315346–315348; Location T11: CAS 139189; MCZ 146961; Location T14: CAS 139190.

*Hemidactylus frenatus* Schlegel, 1836

This house gecko occurs throughout the Philippine archipelago and has been collected on Tablas, Sibuyan,



**Figure 19.** *Gekko gecko* in life (KU 302696; Location M1). Photo by CDS.



**Figure 20.** *Gekko romblon* in life (KU 302741; Location R2). Photo by CDS.

Carabao, and Maestre de Campo. Individuals were found at night in disturbed habitat and often near lights on residential buildings. The record from Maestre de Campo is new for the island. Figure 21. Location Ca1: CAS 128062–128073, 128108–128112, 128115–128119, 128121–128122, 128164–128167, 128171–128174, 128178, 128180–128186, 128190–128195; Location Cr1: CAS 73851–73852; Location M1: KU 302766–302772; Location S1: CAS 73832–73837; Location S2: KU 302779–302786; Location S4: KU 302787–303788, 303991, 304410; Location S5: FMNH 236074–78, KU 326556–326558; Location S8: CAS 137064–137084; Location S9: FMNH 251112, 251113; Location T1: MCZ 26037–26041; Location T3: KU 302751–302752; Location T6: KU 302800–302803; Location T10: USNM 496892, 496893; Location T11: CAS 137194–137202, 185503; Location T13: KU 302814, 303993–303994.



**Figure 21.** *Hemidactylus frenatus* in life (RMB 2940, deposited in PNM; Location S5). Photo by RMB.

*Hemidactylus platyurus* (Schneider, 1792)

We collected individuals of this species of common house gecko in residential areas at night often near lights on the islands of Tablas, Carabao, Sibuyan, and Maestre de Campo. The species has not been previously recorded from Tablas or Maestre de Campo. Location Ca1: CAS 128094, 128177; Location M1: KU 302567–302573; Location S1: CAS 73773–73831, 73838–73850; Location S2: KU 302574–302575; Location T1: MCZ 26052, 26053; Location T6: KU 302599–302600; Location T13: KU 302609–302614, 304123–304128.

*Lepidodactylus lugubris* (Duméril and Bibron, 1836)

*Lepidodactylus lugubris*, a less frequently encountered species from disturbed, coastal areas, has been collected on Tablas and Carabao islands. Individuals are often collected under the dead external layer of the trunk of banana plants. Location Ca1: CAS 128085–128088, 128090–128093, 128132, 128189, 128198; Location T11: CAS 186411.

*Lepidodactylus planicaudus* Stejneger, 1905

This species has been collected from under the dead external layer of the trunk of banana plants. Specimens have been documented on Carabao, Tablas, and Sibuyan. Location Ca1: CAS 128084, 128089, 128129–128131, 128133–128134; Location S6: CAS 139927–139929; Location S8: CAS 142036–142037; Location T11: CAS 139930–938, 142038.

*Pseudogekko compressicorpus* (Taylor, 1915)

This species is a rarely encountered gecko that prefers to perch on aerial ferns or shrubs not far from the ground. It is a slender, arboreal species that has only been documented on Tablas in Romblon Province but is otherwise found on Luzon, Samar, Leyte, Bohol, and Mindanao. It is noteworthy that *P. compressicorpus* appears to replace the normally-encountered Visayan PAIC endemic species *P. brevipes* on Tablas. Location T1: CAS 139713.

Scincidae

*Brachymeles* cf. *bonitae* Duméril and Bibron, 1836

*Brachymeles* cf. *bonitae* is a limb-reduced species of skink that is often encountered under rotting logs and in loose soil surrounding the root networks of large trees. This species, as currently recognized, is widely distributed across the northern Philippine islands (Siler and Brown 2010). Recent phylogenetic studies of the genus *Brachymeles* have not supported its monophyly (Siler *et al.* 2011a; Siler and Brown 2011). The species likely represents a complex of morphologically similar but unique evolutionary lineages worthy of taxonomic recognition. Unlike many species in the genus, *B. bonitae* appears to be a forest obligate, and in the RIG, specimens have been collected on the islands of Tablas and Sibuyan. Location S8: CAS 137053; Location S10: FMNH 251123; Location T1: MCZ 44152; Location T11: CAS 137148–137154.

*Brachymeles talinis* Brown, 1956

Individuals of this common Visayan PAIC endemic species were found in secondary- to primary-growth forest and disturbed habitat on the islands of Tablas, Sibuyan, and Carabao. Specimens were observed under piles of rotting coconut shells, as well as within and beneath rotting logs. Siler and Brown (2010), recently redescribed this species, using molecular phylogenetic analyses to infer its relationships to other *Brachymeles* (Siler *et al.* 2011b; Siler and Brown 2011), and restricted its range to the Visayan (central) faunal region and the RIG. Location Ca1: CAS 128158–128159; Location S4: KU 303990; Location S8: CAS 137054–137057; Location S10: FMNH 251104, 251120; Location T1: MCZ 26579; Location T2: KU 315350–315359; Location T11: CAS 137155–137156.

*Brachymeles tridactylus* Brown, 1956

*Brachymeles tridactylus* has been documented from a range of habitats from secondary- to primary forest, as well as disturbed habitats. This species has only been documented on Carabao Island; however, it is widely distributed in the Visayan (central) islands in the Philippines, often occurring sympatrically with *B. talinis* (Siler and Brown 2010). Although this three-digit species possesses a relatively broad distribution across the central Philippines in comparison to other non-pentadactyl species in the genus (*B. cebuensis*, *B. muntingkamay*, *B. elerae*, *B. wrighti*, *B. pathfinderi*, *B. vermis*, *B. apus*, *B. miriamae*, *B. minimus*, and *B. lukbani*), recent phylogenetic studies have supported the monophyly of populations spanning this distribution (Siler *et al.* 2011a; Siler and Brown 2011) and,

thus we recognize this lineage as a single species. Location Ca1: CAS 128145–128150, 128160–128161.

*Eutropis multifasciata* (Kuhl, 1820)

This species is known to occur throughout the Philippines. We collected individuals of this species on leaf litter material in disturbed habitats on the islands of Tablas and Sibuyan. This species exhibits sexual dichromatism, with males possessing varying patches of brightly colored scales on the lateral surfaces of their body (CDS and RMB, *pers. obs.*). Three specimens identified as *Eutropis* cf. *multicarinata borealis* (MCZ 26602–26604) are reported from Tablas; however, the subspecies has never been documented from Romblon Province (Brown and Alcala 1980). Closer inspection should be made for definitive identification, as they may represent *E. multifasciata*. Location S4: KU 302887–302888; Location S5: FMNH 236079; Location S8: CAS 137088, 185497; Location T2: KU 315360–315363; Location T11: CAS 137254–137257, KU 302904; Location T14: CAS 137292.

*Lamprolepis smaragdina philippinica* (Mertens, 1928)

Specimens of this arboreal species were found to occur in disturbed habitat only, usually on the forest edge in open canopy. Many specimens were collected in coconut groves 2–6 m above the ground. The species has been reported to occur on every island surveyed in the RIG except for Cresta de Gallo Island. Body coloration among populations of this species is highly variable, with several populations known to be entirely green (Siler and Linkem 2011). Our records from Maestre de Campo and Romblon islands represent new island records for this species. Figure 22. Location Ca1: CAS 128095–128096, 128135; Location M1; KU 302840–302849; Location R4: KU 302868, 304006; Location S1: CAS 73863; Location S2: KU 302853–302855; Location S3: KU 304003–304004; Location S4: KU 302856; Location S10: FMNH 236080; Location T1: MCZ 26418; Location T11: CAS 137187–137189; Location T13: KU 304007.

*Lipinia auriculata kempi* (Taylor, 1919)

Individuals of *Lipinia auriculata kempi* were found in secondary forest and more disturbed habitat along the forest edge on the ground or low on the trunks of trees. Specimens have only been collected from the island of Tablas. Location T11: CAS 137247–137252; Location T14: CAS 137289–137291.

*Otosaurus cumingi* (Gray, 1845)

The genus *Otosaurus* recently was resurrected from the synonymy of *Sphenomorphus* to accommodate the phylogenetically distinct, single, Philippine endemic lineage (Linkem *et al.* 2011). *Otosaurus cumingi* is a large species of ground dwelling skink. It has been collected only a few times in leaf litter on the slopes of Mt. Guiting-Guiting, on the island of Sibuyan. Location S8: CAS 139183; Location S10: FMNH 236051–54.

*Parvoscincus decipiens* (Boulenger, 1894)

*Parvoscincus decipiens*, formerly a member of the genus *Sphenomorphus* (Linkem *et al.* 2011), is often found in leaf litter on the forest floor. Specimens were collected in disturbed habitat and into secondary growth forest on Tablas, and the species has also been collected on Sibuyan. Location S10: FMNH 236147; Location T11: CAS 137285–137287; Location T14: CAS 137298–137301.

*Parvoscincus steerei* Stejneger, 1908

As with *Parvoscincus decipiens*, *P. steerei* was previously considered a member of the genus *Sphenomorphus* (Linkem *et al.* 2011). This small species can be found in secondary- and primary-forest in leaf litter. Specimens were collected on Sibuyan and Tablas. Location S1: FMNH 236140; Location S4: KU 302937; Location S8: CAS 137133–137147; Location S10: FMNH 236143–45, 251117, 251118, 251121; Location T1: MCZ 26401–26405; Location T2: KU 315365–315371; Location T8: KU 315364; Location T11: CAS 137281–137284, 139211–139212; Location T14: CAS 137302–137304.




**Figure 22.** A) *Lamprolepis smaragdina philippinica* in life (KU 302843; Location S2); B) *Lamprolepis smaragdina philippinica* (KU 302853; Location S2). Photos by CDS.

Varanidae

*Varanus nuchalis* (Günther, 1872)

This abundant species of monitor lizard has been collected in forested to mixed forest-agricultural habitat on Sibuyan Island, within the Mt. Guiting-Guiting Natural Park. It is usually associated with low-elevation forest near river and stream systems and in agricultural areas throughout much of the central Philippines. Our collections on Sibuyan represent the first record of the species from Romblon Province. Location S1: CM 60493; Location S4: KU 305134, 305148; Location S5: FMNH 236046, 236130.

## Reptilia (Snakes)

Colubridae

*Ahaetulla prasina preocularis* (Taylor, 1922)

We collected this species of vine snake asleep on branches of shrubs in secondary-growth forest. This species is widely distributed in the Philippines (Leviton 1967); however, our collection on Tablas Island represents the first record from Romblon Province. Location T2: KU 315372.

*Boiga cynodon* (Boie, 1827)

We collected this species in arboreal habitats in disturbed and secondary forest on Tablas Island. Individuals were encountered actively hunting at night on branches of trees and shrubs in the forest. This represents a new island record for this species, as it was previously recognized to occur only on the islands of Basilan, Culion, Dinagat, Leyte, Luzon, Mindanao, Palawan, Polillo, Sibutu, Panay, and in the Sulu Archipelago (Leviton 1963; 1970; Alcala 1986; Ferner *et al.* 2000; Gaulke 2001). Location T2: KU 315373, 315382.

*Calamaria gervaisi* Duméril, Bibron, and Duméril, 1854

This burrowing snake is often found in loose leaf litter around the root systems of large trees or under rotting logs. Specimens have been collected from Tablas and Carabao. Location Ca1: CAS 128154; Location T1: MCZ 25751, 25752; Location T2: KU 315384; Location Location T5: KU 315374; T11: CAS 137157–137179, 139187, 185742; Location T14: CAS 137288.

*Chrysopelea paradisi* Boie, 1827

This species of arboreal, gliding snake has been documented to occur on Sibuyan and Tablas. Individuals in the Philippines are often found on the trunks and branches of trees. Location S1: USNM 36114; Location T2: KU 315377; Location T11: CAS 137180.

*Cyclocorus lineatus alcalai* Leviton, 1967

This species was collected under leaf litter and fallen logs in disturbed and second growth forest. As is currently recognized, this species is widely distributed in the northern and central Philippines and the subspecies is endemic to the Visayas (Leviton 1965b). Location T1: MCZ 25670–25674; Location T2: KU 315375; Location T11: CAS 137181–137184.

*Dendrelaphis marenae* Vogel and van Rooijen, 2010

A common vine snake in the Philippines, *Dendrelaphis marenae* was found on Carabao and Tablas, usually 2–4 m above the ground on branches and shrubs. Individuals were often encountered asleep at night coiled on branches. Location Ca1: CAS 128156–128157; Location T2: KU 315376; Location T11: CAS 137191.

*Dryophiops philippina* Boulenger, 1896

An uncommon snake recognized to occur on the islands of Bataan, Luzon, Mindoro, and Sibuyan. A singe specimen has been recorded from Sibuyan. Location S1: CM 2432

*Lycodon capucinus* Boie, 1827

We found individuals of this species under leaf litter and fallen logs in disturbed agricultural areas and secondary forest. Although there are five endemic Philippine species of snakes in the genus *Lycodon*, *L. capucinus* is recognized to have a broad distribution across much of Southeast Asia (Leviton 1965a). Location Ca1: CAS 128155; Location S8: CAS 137087; Location T2: KU 315378; Location T3: KU 305143; Location T11: CAS 137253.

*Oligodon modestum* Günther, 1864

This endemic species of Philippine terrestrial snake is recognized to occur on the islands of Luzon, Mindanao, Negros, Panay, and Tablas. A single specimen of this species is reported from Tablas. Location T9: MCZ 25726.

*Pseudorabdion mcnamarae* (Taylor, 1917)

Individuals of this small fossorial snake identified as *Pseudorabdion mcnamarae* were collected on Tablas and Sibuyan beneath rotting logs in primary forest. Location S8: CAS 137100; Location T14: CAS 137296.

## Elapidae

*Laticauda colubrina* (Schneider, 1799)

The distinctively banded yellow-lipped sea krait, *Laticauda colubrina,* is a marine snake found in shallow marine environments throughout much of Southeast Asia, including the shallow seas throughout the Philippine archipelago. Specimens were collected off the shores of Maestre de Campo by fishermen, and represent the first records of this species from the shallow waters surrounding Romblon Province. Figure 23. Location M1: KU 303031–303033.




**Figure 23.** A and B) *Laticauda colubrina* in life (KU 303031; Location R4). Photos by CDS.

## Homalopsidae

*Cerberus rynchops* (Schneider, 1799)

*Cerberus rynchops* is a fully aquatic snake, found

in brackish estuarine waters throughout much of the Philippines. In the RIG, this species was observed near banks of fish ponds and temporary pools in shallow water. Specimens were collected on Sibuyan and Tablas. Location S8: CAS 138149; Location T1: MCZ 25686–25689; Location T6: KU 302984–302987.

TYPHLOPIDAE

*Rhamphotyphlops braminus* (Daudin, 1803)

*Rhamphotyphlops braminus* is a very small species of parthenogenetic burrowing blindsnake. Individuals were usually found under rotting logs, coconut shells and loose leaf litter on the islands of Tablas and Sibuyan. Location S1: MCZ 25641, 25642; Location S8: CAS 169880; Location T1: MCZ 25575–25581; Location T3: KU 307744; Location T13: KU 307745.

*Typhlops ruficaudus* (Gray, 1845)

*Typhlops ruficaudus* is an endemic Philippine blindsnake, and has been documented on Sibuyan and Tablas in the RIG. This species has also been observed in the rotting organic material within and beneath rotting logs in primary forest. A single specimen identified as *T. castanotus* (MCZ 25595) has been documented from Tablas (Location T1). However, we believe the identification is in error, and this specimen likely represents *T. ruficaudus*, for two reasons. First, another specimen in the same collection series (MCZ 25594) has been identified as *T. ruficaudus* (A. Wynn, *pers. comm.*), and second, no other specimens of *Typhlops castanotus* have ever been documented from the Romblon Province, and the species is currently recognized to occur only on Inampulugan Island, Boracay Island and the northern coast of Panay Island, in the Negros-Panay PAIC (Wynn and Leviton 1993; A. Wynn, *pers. comm.*). Unfortunately, we have not examined this specimen; it may represent *T. ruficaudus*. Location S8: CAS 169879; Location T1: MCZ 25594, 25595; Location T11: CAS 169881.

GERRHOPILIDAE

*Gerrhopilus hedraeus* (Savage, 1950)

This endemic Philippine blindsnake has been recorded on Tablas, in loose soil beneath a rotting log in primary-growth forest. Previously recognized to be a member of *Typhlops ater* group, a recent phylogenetic study of blindsnakes justified the resurrection of the genus *Gerrhopilus* (Vidal *et al.* 2010). Location T11: CAS 169882.

## REPTILIA (Turtles)

BATAGURIDAE

*Cuora amboinensis amboinensis* Daudin, 1802

This species of Asian box turtle is commonly found along small river systems, in open fields and in temporary pools of water (Diesmos *et al.* 2008). Specimens were collected on Tablas and Sibuyan islands. According to the local government units and the Mt. Guiting-Guiting Natural Park staff on Sibuyan, the Sibuyan population of this species has historically experienced extreme hunting pressures and illegal poaching, which has drastically reduced local populations. This study presents the first records of this species from Tablas. Figure 24. Location S2: KU 300455; Location S3: KU 305173; Location S5: KU 300461; Location T2: KU 315380–315381; Location T5: KU 315379.

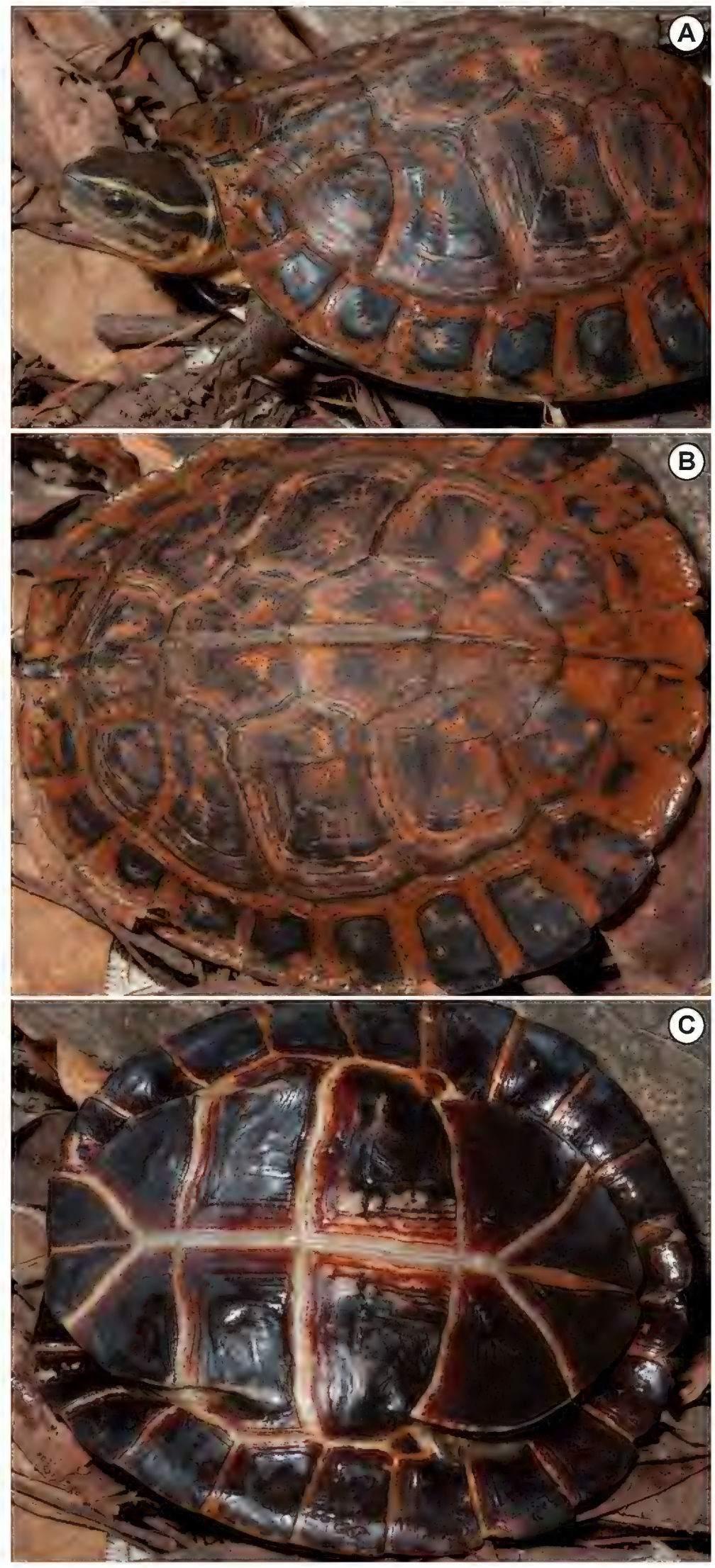



**FIGURE 24.** *Cuora amboinensis* in life (KU 300455; Location R3) in lateral (A) dorsal (B) and ventral (C) views. Photos by CDS.

Our surveys provide extensive new data on the diversity of amphibians and reptiles in Romblon Province (Table 2). The species encountered in the RIG include nine new records for Tablas, eight for Romblon, four for Sibuyan, and five for Maestre de Campo. This comprehensive review provides additional information on rare species known previously from few observations and specimens. This study provides additional support for the absence of rare

species historically believed to be endemic to islands in the RIG. Specifically no species were observed that matched the description of *Luperosaurus amissus* Taylor 1962. Once believed to be endemic to Tablas (Taylor 1922a, b), this species of gecko is now recognized to be *G. hokouensis* Pope 1928, occurring in eastern China, Japan, and Taiwan (Brown and Alcala 1978; Ota *et al.* 1989), most likely attributed to the Philippines in error. Although much of the habitat we explored was secondary regenerating forest at best, moderate species diversity was encountered at all sites. At all sites visited, signs of low-level disturbances were apparent, included logging, swidden agriculture, and possible mining. The introduced species *Rhinella marina* was observed during our surveys, suggesting that this invasive species may also have been introduced to many small, isolated islands throughout the Philippines.

Because the islands of Romblon Province are situated between three major, recognized faunal regions in the Philippines (Luzon, Mindoro, and Negros-Panay PAICs), it is interesting to consider the degree to which each surrounding region has served as a biogeographic source for the unique herpetofauna of the RIG. The results of this study indicate that, with few exceptions, the Luzon and Visayan PAICs share the same degree of similarity with the islands of the Romblon Province (Table 3). The one exception is Carabao Island, which is more similar to the fauna from the Visayan PAIC. This comes as no surprise, however, as Carabao is located between Tablas and Panay (Figure 1). Interestingly, of the three major islands in the province, Sibuyan and Tablas share more faunal similarity with the Luzon and Visayan PAIC, than either island does with the Mindoro PAIC (Table 3). This is in contrast to Romblon Island, which shares the greatest faunal similarity with the Mindoro PAIC (Table 3). Romblon is located between the larger islands of Sibuyan and Tablas in the province, and its high degree of faunal similarity with the Mindoro PAIC seems counterintuitive.

Within the RIG, there is a high degree of faunal similarity between islands, with a few exceptions (Table 4). The island of Maestre de Campo is observed to have the lowest overall faunal similarity with other island members of the RIG (Table 4). This may be due to its proximity to the Mindoro PAIC, or its distance from the many islands in the RIG. Interestingly, two of the small islands sampled (Carabao, Maestre de Campo) share higher faunal similarities with Sibuyan and Tablas than they do Romblon (located in the center of the three big islands of the RIG (Table 4). The unique, patchy pattern of faunal similarity and endemism observed in this study provide opportunities for future studies focusing on the biogeography and species distributions in the region.

From the few published phylogenetic studies that include dense sampling of widely distributed species in the Philippines, several interesting patterns can be observed. In a recent phylogenetic study, the gecko species endemic to the RIG (*Gekko romblon*, *G. coi*) are recovered as sister lineages to species from the Luzon and Visayan PAICs (Siler *et al.* 2012). In the same study, Siler *et al.* (2012) recovered the Maestre de Campo population of *Gekko mindorensis* as one of eight deeply divergent, well-supported clades making up the *G. mindorensis* complex. The populations of *G. mindorensis* supported to be most closely related to the divergent population on Maestre de Campo were shown to all be from the Mindoro and Luzon PAICs (Siler *et al.* 2012). Interestingly, the same pattern has been observed for widespread species of geckos in the genus *Cyrtodactylus* (Siler *et al.* 2010a). The RIG populations of the widespread species *C. philippinicus* are supported (albeit with weak support) to be most closely related to populations from the Mindoro and Luzon PAICs (Siler *et al.* 2010a).

This study results in the recognition of 55 species of amphibians and reptiles from Romblon Province (Table 2). Although it contributes greatly to our knowledge of this unique herpetofauna, the resulting 26 new species records for Romblon Province highlight the fact that our current understanding of the region's diversity is still incomplete. Several small, isolated islands in the province have yet to be explored (*e.g.* Alad, Banton, Carlota, Cobrador, Isabel, Lugbung, Simara). Additionally, surveys should be undertaken on the small islands on which historical collections were made (Carabao, Cresta de Gallo) as the currently recognized diversity on these islands is surely underestimated. It remains to be seen whether the small islands of the Philippines will possess significant levels of endemic vertebrate diversity as has been reported from small islands adjacent to the Asian mainland (see Grismer and Onn 2010 for a review). The limited available evidence suggests that some smaller, land-bridge islands do possess endemic species (*i.e. Gekko gigante* [Brown and Alcala 1978] and *Platymantis insulatus* [Brown and Alcala 1970]) and it is clear that many small oceanic islands likewise possess highly distinctive endemics (Brown *et al.* 2008, 2009b; Oliveros *et al.* 2011). We suspect that future studies in the area, as well as continued research on the many unexplored islands in the province, will result in additional species distribution records and the possible discovery of new, endemic taxa. Many groups of amphibians and reptiles in Romblon Province warrant additional taxonomic study. These include species of the genera *Platymantis, Brachymeles, Cyrtodactylus, Gekko,* and *Limnonectes*, all of which contain widespread species with distributions spanning traditionally recognized faunal zone demarcations (Brown and Diesmos 2002; 2009). Over the last ten years alone, studies involving just a few of these groups have resulted in the discovery of numerous new species (Brown *et al.* 2008; Brown and Guttman 2002; Rösler *et al.* 2006; Brown and Gonzalez 2007; Siler *et al.* 2007; Siler *et al.* 2009a, b, c, 2010b, c, d; 2011b; in press; Linkem *et al.* 2010a; Welton *et al.* 2009, 2010a, b). As the number of faunal descriptions for sites across the Philippines increase, and our understanding of the mechanisms driving diversification in the archipelago improves, we are gradually approaching a more thorough understanding of the evolutionary history of Philippine vertebrates (Brown and Diesmos 2009; Esselstyn and Brown 2009; Jansa *et al.* 2006; Linkem *et al.* 2010b; Siler *et al.* 2010a, 2011a, *in press*). However, before truly informed conservation planning can be implemented, much taxonomic work remains to be completed in this island archipelago most likely characterize by vastly underestimated biodiversity (Brown and Diesmos 2009).

**Table 2.** Checklist of terrestrial herpetofauna of the Romblon Island Group. The far right columns show checklists of species shared between the Luzon, Mindoro, and Visayan Pleistocene Aggregate Island Complexes (PAIC; Brown and Diesmos 2002) and the islands of the RIG. Taxa denoted "Endemic" (in parentheses) are endemic to the Romblon Island Group.

| SPECIES | CARABAO | CRESTA DE GALLO | MAESTRE DE CAMPO | ROMBLON | SIBUYAN | TABLAS | LUZON PAIC | MINDORO PAIC | NEGROS-PANAY PAIC |
|---|---|---|---|---|---|---|---|---|---|
| **Class Amphibia** | | | | | | | | | |
| Order Anura | | | | | | | | | |
| Family Bufonidae | | | | | | | | | |
| *Rhinella marina* | | | | | X[1] | X | X | X | X |
| Family Ceratobatrachidae | | | | | | | | | |
| *Platymantis* cf. *pygmaeus* | | | | | X | X | X | | |
| *Platymantis* cf. *dorsalis* | | | | X | X | X | X | X | X |
| *Platymantis lawtoni* (Endemic) | | | | | | X | | | |
| *Platymantis levigatus* (Endemic) | | | | | X | X | | | |
| Family Dicroglossidae | | | | | | | | | |
| *Fejervarya moodei* | X | | | X | X | X | X | X | X |
| *Fejervarya vittigera* | | | | X | X | X | X | X | X |
| *Limnonectes* cf. *leytensis* | X | | | | X | X | | | X |
| *Occidozyga laevis* | | | | X | X | X | X | X | X |
| Family Microhylidae | | | | | | | | | |
| *Kaloula* cf. *conjuncta negrosensis* | X | | | | X | X | | | X |
| Family Ranidae | | | | | | | | | |
| *Hylarana erythraea* | | | | X | X | X | X | X | X |
| Family Rhacophoridae | | | | | | | | | |
| *Polypedates* cf. *leucomystax* | | | | X | | X | X | X | X |
| *Rhacophorus pardalis* | | | | | | X | X | | X |
| **Class Reptilia** | | | | | | | | | |
| Order Testudines | | | | | | | | | |
| Family Bataguridae | | | | | | | | | |
| *Cuora amboinensis* | | | | | X | X | X | X | X |
| Order Squamata | | | | | | | | | |
| Family Agamidae | | | | | | | | | |
| *Bronchocela marmorata* | X | | | | X | X | X | X | X |
| *Draco quadrasi* | | | | X | X | | | X | |
| *Draco spilopterus* | X | | | | | X | X | | X |
| *Gonocephalus* cf. *sophiae* | | | | | X | | | | |
| *Hydrosaurus pustulatus* | | | | X | X | X | X | X | X |
| Family Gekkonidae | | | | | | | | | |
| *Cyrtodactylus philippinicus* | | | | X | X | X | X | X | X |
| *Gehyra mutilata* | X | | | | X | X | X | X | X |
| *Gekko coi* (Endemic) | | | | | X | | | | |
| *Gekko gecko* | X | | X | | | X | X | X | X |
| *Gekko mindorensis* | | | X | | | | X | X | X |
| *Gekko romblon* (Endemic) | | | | X | | X | | | |
| *Hemidactylus frenatus* | X | X | X | | X | X | X | X | X |

**Table 2.** ***Continued.***

| SPECIES | CARABAO | CRESTA DE GALLO | MAESTRE DE CAMPO | ROMBLON | SIBUYAN | TABLAS | LUZON PAIC | MINDORO PAIC | NEGROS-PANAY PAIC |
|---|---|---|---|---|---|---|---|---|---|
| *Hemidactylus platyurus* | X | | X | | X | X | X | X | X |
| *Lepidodactylus lugubris* | X | | | | | X | | | X |
| *Lepidodactylus planicaudus* | X | | | | X | X | X | X | X |
| *Pseudogekko compressicorpus* | | | | | | X | X | | X |
| Family Scincidae | | | | | | | | | |
| *Brachymeles* cf. *bonitae* | | | | | X | X | X | X | |
| *Brachymeles talinis* | X | | | | X | X | | | X |
| *Brachymeles tridactylus* | X | | | | | | | | X |
| *Eutropis multifasciata* | | | | | X | X | X | X | X |
| *Lamprolepis smaragdina philippinica* | X | | X | X | X | X | X | X | X |
| *Lipinia auriculata kempi* | | | | | | X | | X | |
| *Otosaurus cumingi* | | | | | X | | X | X | |
| *Parvoscincus decipiens* | | | | | | X | X | | |
| *Parvoscincus steerei* | | | | | X | X | X | X | X |
| Family Varanidae | | | | | | | | | |
| *Varanus nuchalis* | | | | | X | | | | X |
| Family Colubridae | | | | | | | | | |
| *Ahaetulla prasina preocularis* | | | | | | X | X | | X |
| *Boiga cynodon* | | | | | | X | X | | X |
| *Calamaria gervaisi* | X | | | | | X | X | X | X |
| *Chrysopelea paradisi* | | | | | X | X | X | | X |
| *Cyclocorus lineatus lineatus* | | | | | | X | X | X | X |
| *Dendrelaphis marenae* | X | | | | | X | X | | X |
| *Dryophiops philippina* | | | | | X | | X | X | |
| *Lycodon capucinus* | X | | | | X | X | X | X | X |
| *Oligodon modestum* | | | | | | X | X | | X |
| *Pseudorabdion mcnamarae* | | | | | X | X | X | | X |
| Family Homalopsidae | | | | | | | | | |
| *Cerberus rynchops* | | | | | X | X | X | | X |
| Family Typhlopidae | | | | | | | | | |
| *Rhamphotyphlops braminus* | | | | | X | X | X | X | X |
| *Typhlops ruficaudus* | | | | | X | X | X | | |
| Family Gerrhopilidae | | | | | | | | | |
| *Gerrhopilus hedraeus* | | | | | | X | X | X | X |
| Family Elapidae | | | | | | | | | |
| *Laticauda colubrina* | | | X | | | | | | |
| Total number of species | 17 | 1 | 6 | 11 | 35 | 46 | | | |
| Total number of island endemics | 0 | 0 | 0 | 0 | 1 | 1 | | | |
| Percentage of island endemics | 0% | 0% | 0% | 0% | 3% | 2% | | | |

[1]Non-vouchered observations made of *Rhinella marina* by CDS and RMB.

**Table 3.** Indices of herpetofaunal similarity with the Luzon, Mindoro, and Negros-Panay Pleistocene Aggregate Island Complexes (PAIC; Brown and Diesmos 2002).

| | SIMPSON SIMILARITY INDEX (%) | | |
|---|---|---|---|
| | **Luzon PAIC** | **Mindoro PAIC** | **Negros-Panay PAIC** |
| Caribao | 71% | 59% | 100% |
| Cresta de Gallo | 100% | 100% | 100% |
| Maestre de Campo | 100% | 100% | 100% |
| Romblon | 82% | 91% | 82% |
| Sibuyan | 77% | 66% | 74% |
| Tablas | 83% | 57% | 83% |

**Table 4.** Indices of herpetofaunal similarity among surveyed islands of the Romblon Island Group.

| SIMPSON SIMILARITY INDEX (%) | | | | | | |
|---|---|---|---|---|---|---|
| | Caribao | Cresta de Gallo | Maestre de Campo | Romblon | Sibuyan | Tablas |
| Caribao | — | | | | | |
| Cresta de Gallo | 6% | — | | | | |
| Maestre de Campo | 13% | 100% | — | | | |
| Romblon | 9% | 0% | 17% | — | | |
| Sibuyan | 65% | 100% | 50% | 82% | — | |
| Tablas | 94% | 100% | 67% | 91% | 79% | — |

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